PROJECT DESCRIPTION

GENERAL

THIS PORTION OF THE PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF US 301 (CRAIN HIGHWAY) AT CLYMER DRIVE IN PRINCE GEORGE'S COUNTY. GEOMETRIC MODIFICATIONS ARE PROPOSED TO WIDEN THE EAST LEG, CONSTRUCT A SOUTHBOUND DOUBLE LEFT-TURN LANE AND CONSTRUCT A NORTHBOUND DOUBLE LEFT-TURN LANE. VIDEO DETECTION IS PROPOSED FOR ALL PRESENCE DETECTION AND NON-INVASIVE MICROLOOP PROBES ARE ALSO PROPOSED FOR SETBACK DETECTION. ALL EXISTING TRAFFIC SIGNAL HEADS WILL BE UPGRADED TO BLACK-FACED LED. US 301 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA SIX-PHASE, FULL-TRAFFIC ACTUATED MODE. EXCLUSIVE LEFT-TURN PHASING WILL BE PROVIDED ON US 301. AN EAST- AND WESTBOUND SIDE STREET SPLIT IS ALSO PROPOSED. LEAD/LAG OPERATION IS ALSO PROPOSED FOR NORTH- AND SOUTHBOUND LEFT TURNS.

CONTROLLER REQUIREMENTS

331 Redwood Grove Court Millersville, Maryland 21108 Tel: (410) 987-3888 Fax: (443) 782-2288

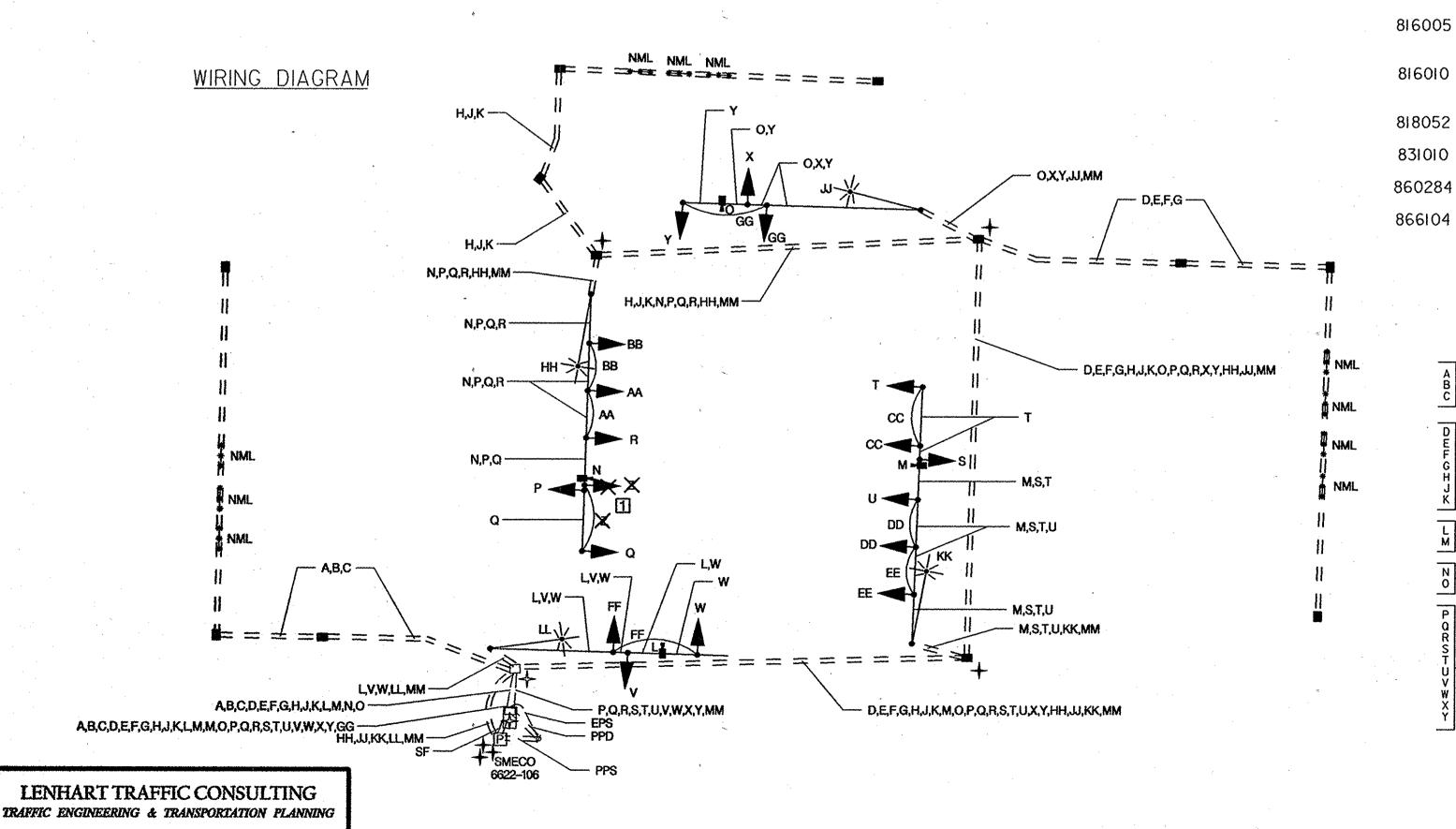
THE EXISTING BASE MOUNTED TRAFFIC SIGNAL CONTROLLER WILL REMAIN. THE SHA SIGNAL SHOP WILL INSTALL A VIDEO DETECTION CAMERA INTERFACE FOR I-4 CAMERAS IN THE EXISTING CABINET.

PHONE DROP

THE CONTRACTOR SHALL NOTIFY MR. ROBERT SNYDER OF SHA AT (410) 787-7635 TO ARRANGE FOR THE INSTALLATION OF THE PHONE DROP. THE CONTRACTOR IS TO PROVIDE MR. SNYDER WITH THE NEAREST STREET ADDRESS, ZIP CODE AND PHONE NUMBER.

PHASE CHART

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PHASE I CHANGE	- ¥		¥	G	G	G	- R-	-R	- R-	R	R	R ·	R	R	R	R	R	R	I C	
PHASE 2 + 6	R-	R -	-14	G	G	G	- R -	-R -		G	G	G	R	R	R	Ŕ	R	R	1	
PHASE 6 CHANGE	- R	-R -	+	Y	Y	Y	-R	→ R-,	- R-	G	G	G	R.	R	R	R	R	R	-	H
PHASE 2 + 5	→ R-	-R -	-	R	R -	R	-6	-6-	-6	G	G	G	R	R	R	R	R	R		H
PHASE 2 + 5 CHANGE	→R-	→R	-4	R	R	R			—Y-	Y	Y	Υ	R	R	R	R	R	R		<u>-</u> H
PHASE 3	→R-	-R	R	R	R	R	R	→ R		R	R	R	G/G	G	G	R	R	R		H
PHASE 3 CHANGE	R -	→R	R	R	R	R	- R	→ R-	→R-	R	R	R	Y	Y	Y	R	R	R	-	Н
PHASE 4	R -	-R -	- -R-	R	R	R	→ R-	→R	R -	R	R	R	R	. R	R	GG	G	G		H
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FLASHING OPERATION	FL/RA	FL/RA	FL/RA	FL/Y	FL/Y	FL/Y	FL/RA	FL/RA	FL/RA	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	+	-



EQUIPMENT LIST 'A'

2 EA

THE CONTACT PERSONS FOR DISTRICT #3 ARE AS FOLLOWS:

Mr. Brian Young Assistant District Engineer - Traffic Phone: 301-513-7358

Mr. Augie Rebish Assistant District Engineer - Utility Phone: 301-513-7350

Mr. Richard L. Daff Sr. Chief, Traffic Operations Division Phone: 410-787-7630

Chief, SHA Traffic Signal Shop Phone: 410-787-7652

Calverton, Maryland 20705 Phone: 301-931-2880

Mr. Edward Rodenhizer

Mr. Wayne Mowdy Assistant District Engineer - Maintenance Phone: 301-513-7304

The Power Company Representative is: Southern Maryland Electrical Cooperative 4061 Powder Mill Road, Suite 600

APPROVED SHA EQUIPMENT TO BE PURCHASED BY THE DEVELOPER AND INSTALLED BY THE CONTRACTOR. ALL EQUIPMENT IN THIS LIST SHALL HAVE CATALOG CUTS SUBMITTED FOR APPROVAL PRIOR TO INSTALLATION.

	HAVE CATA	ALUG CUIS SUL	BMITTED FOR APPROVAL PRIOR TO INSTALLATION.	20
	CAT CODE	QUANTITY	DESCRIPTION	<u>CA</u>
	800000	I EA	VIDEO DETECTION CAMERA INTERFACE (I-4 CAMERAS)	12
. ,	800000	6 EA	8 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION	2
	800000	176 SF [] 169 SF	FURNISH AND INSTALL SHEET ALUMINUM SIGNS - MAST ARM/GROUND MOUNT	5
			I EA - SHIELD ASSEMBLY (48"×75") "NORTH, US 301, LEFT ARROW"	80
			I EA SHIELD ASSEMBLY (30"×51") "NORTH, US 301, RIGHT ARROW"	8
			I EA - SHIELD ASSEMBLY (48"×75") "SOUTH,US 301, LEFT ARROW"	8
		٠.	I EA - SHIELD ASSEMBLY (30"x51") "SOUTH, US 301, RIGHT ARROW"	8
			I EA - D-3(I) (VAR×I6") DUAL FACED "CLYMER DR"	8
	· .		I EA - D-3(I) (VAR×16") DUAL FACED "MATAPEAKE BUS DR"	8
			2 EA - D-3(I) (VAR×16") DUAL FACED "ROBERT S CRAIN HWY"	8
			I EA - W9-2(4) (30"×42") "LANE ENDS, MERGE LEFT"	82
			6 EA - R3-5L (30"×36")	8
		11 -	1 EA R3-5 (MOD) (30*x36")	8
			I EA - R3-6L (30"×36")	8
			2 EA - W3-3 (48"×48")	8
	800000	2 EA	27 FOOT STEEL POLE WITH 75 FOOT MAST ARM	8
	807202	I EA	METERED SERVICE PEDESTAL	
	810601	3 EA	NON-INVASIVE MICROLOOP PROBE, 500 FOOT LEAD-IN CABLE	
	810605	7 EA	NON-INVASIVE MICROLOOP PROBE, 1000 FOOT LEAD-IN CABLE	
	816001	4 EA	VIDEO DETECTION CAMERA	

CONTROL CABLE, 250 FOOT, VIDEO DETECTION

CONTROL CABLE, 500 FOOT, VIDEO DETECTION

27 FOOT STEEL POLE WITH 70 FOOT MAST ARM

20 FOOT LIGHTING ARM ON SIGNAL STRUCTURE

12 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION

CAMERA TO CONTROLLER

CAMERA TO CONTROLLER

250 WATT HPS LAMP AND LUMINAIRE

EQUIPMENT LIST 'B'

EQUIPMENT TO BE PURCHASED BY THE DEVELOPER AND INSTALLED BY THE CONTRACTOR. ALL EQUIPMENT IN THIS LIST SHALL HAVE CATALOG CUTS SUBMITTED FOR APPROVAL PRIOR TO INSTALLATION.

	CAT CODE	QUANTITY	DESCRIPTION
	120500	ILS	MAINTENANCE OF TRAFFIC
ON	203030	2 CY	TEST PIT EXCAVATION
	585424	200 LF	24 INCH WHITE LEAD FREE FEFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
	800000	ILS	REMOVE AND DISPOSE OF TRAFFIC SIGNAL EQUIPMENT
	801101	21 CY	CONCRETE FOR SIGNAL FOUNDATION
•	801106	20 LF	WOOD SIGN SUPPORTS, 4 INCH X 6 INCH
	802501	600 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
	805115	270 LF	3 INCH SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - BORED
	805118	415 LF	4 INCH SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - BORED
	805125	35 LF	2 INCH SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - TRENCHED
	805135	600 LF	3 INCH SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - TRENCHED
	811011	12 EA	ELECTRICAL HANDHOLE
	822500	IEA	AS BUILT FOR SHA ON CADE
	832017	150 LF	I CONDUCTOR, NO. 4 AWG, TYPE USE, 600V
	837001	4 EA	GROUND ROD - 3/4 INCH DIAMETER BY 10 FOOT LENGTH
	861107	220 LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
	861108	3750 LF	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
	861116	1300 LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG), TC
CABLE			en de la composition de la composition La composition de la
CABLE			

EQUIPMENT LIST 'C'

EQUIPMENT TO BE REMOVED AND RETURNED TO SHA.

CAT CODE QUANTITY DESCRIPTION

NONE - ALL EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR

MICROLOOP PROBE, 500 FOOT LEAD-IN CABLE MICROLOOP PROBE, 1000 FOOT LEAD-IN CABLE CONTROL CABLE, 250 FOOT, VIDEO DETECTION MM -NO.6 AWG STRANDED BARE COPPER GROUND WIRE N CONTROL CABLE, 500 FOOT, VIDEO DETECTION O CAMERA TO CONTROLLER NML - PROPOSED NON-INVASIVE MICROLOOP PROBE SET -ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG) PPD - PROPOSED PHONE DROP EPF - EXISTING POWER FEED SF -ELECTRICAL CABLE - I CONDUCTOR, NO. 4 AWG, TYPE USE, 600V

-ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)

JU - ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG), TO

+-PROPOSED GROUND ROD - 3/4 INCH DIAMETER x 10 FOOT LENGTH

+-EXISTING GROUND ROD - 3/4 INCH DIAMETER x 10 FOOT LENGTH

P-PROPOSED METERED SERVICE PEDESTAL

PROPOSED UNDERGROUND POWER SERVICE
ELECTRICAL CABLE - I CONDUCTOR, NO. 4 AWG, TYPE USE, 600V
(3 RUNS WITH 3-30' COILS OF SLACK CABLE AT UTILITY POLE)
(FINAL SERVICE CONNECTION TO BE MADE BY SMECO)

F.A.P. NO.__

STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

US 301 (CRAIN HIGHWAY) AT CLYMER DRIVEMATAPEAKE BUSINESS DRIVE

TOD NO.

	GENE	RAL INFO	RMA	FION		
SCALE NONE	DATE	NOVEMBER 200	Z CON	TRACT	NO	BW996M8
DESIGNED BY	CC	PRINCE GEORGE'S				
DRAWN BY	L.O	16030100.77				
CHECKED BY	MML	7.	I.M.S.	NO		-666

DRAWING NO. TS-4065-B-GI OF

N /A

SHEET NO.